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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/482,263	01/13/2000	Gunter Halmschlager	P18720	6753
7055	7590	05/13/2004	EXAMINER	
GREENBLUM & BERNSTEIN, P.L.C.			HUG, ERIC J	
1950 ROLAND CLARKE PLACE			ART UNIT	
RESTON, VA 20191			PAPER NUMBER	
			1731	

DATE MAILED: 05/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/482,263	HALMSCHLAGER ET AL.	
	Examiner	Art Unit	
	Eric Hug	1731	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 December 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-13,15-37 and 39-53 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 16-21,25-37 and 39-53 is/are allowed.
- 6) ☒ Claim(s) 2-13,15 and 22-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 January 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Amendment

The following is in response to the amendment filed on December 16, 2003.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

1. Claims 2-13, 15, and 22-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chalon (US 1,925,917). Chalon discloses an endless press belt for a press section of a paper making machine, whereby the belt is made of a material such as rubber that is reinforced with a fiber web or metal web, or made of a fiber or metal web or other reinforcing material in conjunction with an impregnating material such as rubber (see particularly page 1, lines 59-74). The metal web reads on the claimed metallic long-chain support structure and the rubber material reads on the claimed filler. The belts must be perforated to provide drainage passages for water. Therefore, such a belt is rendered impermeable prior to perforation. The intermediate structure of the belt reads on the claimed invention.

With regards to the shape of the cross section of the metallic wires used in a metal web, a rounded cross-section is conventionally chosen, and is the shape of choice in Chalon as evident from the drawings. Other shapes of wires would be obvious in view of *In re Dailey*, 149 USPQ 47 (CCPA 1976) (change in form or shape is an obvious engineering design).

2. Claims 2-6, 13, 15, and 22-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Majaneimi (US 4,482,430) discloses a compressible endless press band that is impermeable

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to water for use in a press in a paper machine. The press band (2) comprises a polymeric material and a support structure (15) for absorbing longitudinal and transverse forces, which can be made of steel (see column 4, lines 10-22). This would be obvious to one skilled in the art to be a support having an interconnecting structure of metallic wires, threads, or the like oriented in both the longitudinal and transverse directions, i.e. as a wire mesh or screen.

Allowable Subject Matter

Claims 16-21, 25-37, and 39-53 are allowed.

The following is a statement of reasons for the indication of allowable subject matter:

Claims 16-18 are allowed for further providing that the belt is impermeable to a fluid.

This has been interpreted as being the entire belt, not just a portion of the belt.

Claims 45 and 46 are allowed for reasons given previously regarding claim 45.

Claims 51-53 are allowed for at least providing the step of removing plastic filler from both sides of the belt to expose metal filaments on both sides.

Claims 19-21, 25-37, 39-44, and 47-50 were previously allowed.

Response to Arguments

Applicant's arguments filed on December 16, 2003 have been fully considered.

Applicant's amendment to claim 45 and supporting arguments have overcome the objection set forth previously.

Applicant's arguments regarding the rejection of claims 2-13, 15, and 22-24 based on Chalon (US 1,925,917) are not persuasive. Applicant argues that Chalon does not disclose or suggest inter alia a belt for a material web producing machine, comprising a plurality of long-chain strength supports composed of a metallic material and arranged to form interstices and *a filler at least partially filling the interstices to make said belt fluid impermeable* (emphasis by Applicant). Applicant has also argued that the likeliness of the belt of Chalon being initially formed without perforations is speculative. The examiner has interpreted the reinforcing web of Chalon, in particular the metal web, to be the claimed plurality of long-chain strength supports. The examiner has also interpreted that belt materials given on page 1, second column, lines 59-74 of Chalon, in particular rubber or rubber impregnate, as being a filler which fills the interstices of the reinforcing web rendering it impermeable. The initial impermeability of the belt is confirmed by the fact that the perforations are cut through the belt after the belt is formed (page 2, lines 1-2). There is no other disclosed method of forming the perforations. Therefore, it remains the examiner's position that the belt of Chalon discloses the claimed features and that the intermediate structure of the belt prior to perforating is impermeable.

Applicant's arguments regarding the rejection of claim 46 based on Chalon

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(US 1,925,917) are persuasive. The belt of Chalon is structured as a press belt, which differs from being structured as a sealing belt for a dryer device. The structure of the belt of Chalon as disclosed by Chalon is unsuitable for a dryer device.

Applicant's arguments regarding the rejection of claims 2-6, 13, 15, and 22-24 based on Majaneimi (US 4,482,430) are not persuasive. Applicant argues that Majaneimi does not disclose or suggest *inter alia* a belt for a material web producing machine, comprising *a plurality of long-chain strength supports* composed of a metallic material and *arranged to form interstices* and *a filler at least partially filling the interstices to make said belt fluid impermeable* (emphasis by Applicant). Applicant also argues that the examiner has identified no language which discloses or suggests that the steel structure of Majaneimi is *a plurality of long-chain strength supports* composed of a metallic material and *arranged to form interstices* (emphasis by Applicant). Particular attention has been given to the paragraph in column 4, lines 10-23 of Majaneimi. Majaneimi discloses that the press band can be made of an elastic compressible material, such as urethanes, rubber, etc. Majaneimi also states that it is preferred to use in the band additionally a support structure for absorbing longitudinal and transverse forces (emphasis added by the examiner). For a support structure to absorb both longitudinal and transverse forces, it must consist of a woven or mesh-like array of longitudinal and transverse elements. This is further evidenced by the following paragraph of Majaneimi where one preferred embodiment comprises rubber reinforced with a nylon fabric. The materials for the support structures may comprise steel. For the purposes of the above rejection, the steel support structure of Majaneimi has been interpreted by the examiner as being the claimed metallic long-

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chain strength supports and the elastic material has been interpreted as a filler material for filling the interstices of the support structure.

Applicant's amendment to claim 16 and supporting arguments have overcome the previous rejection of claim 16 based on Smith (US 5,506,033). Smith is concerned only with rendering the belt impermeable at the edges.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

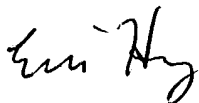
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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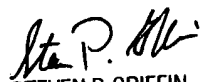
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric Hug whose telephone number is 571 272-1192. The examiner can normally be reached on Monday through Friday, 10:00 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on 571 272-1189. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



jeh


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